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Cauda Equina Syndrome

Low back pain is common and usually goes away without surgery. But a rare disorder affecting the bundle of nerve roots (cauda equina) at the lower (lumbar) end of the spinal cord is a surgical emergency.

Cauda equina syndrome (CES) occurs when the nerve roots are compressed and paralyzed, cutting off sensation and movement. Nerve roots that control the function of the bladder and bowel are especially vulnerable to damage.

It is a surgical emergency. CES may cause permanent paralysis, impaired bladder and/or bowel control, loss of sexual sensation and other problems. Even if the problem gets treatment right away, you may not recover complete function.

What Causes CES

CES may be caused by a ruptured disk, tumor, infection, fracture or narrowing of the spinal canal. It may also happen because of a violent impact such as a car crash, fall from significant height or penetrating (i.e., gunshot, stab) injury. Children may be born with abnormalities that cause CES.

How do I know about having this problem?

Although you need early treatment to prevent permanent problems, CES may be difficult to diagnose. Symptoms vary in intensity and may evolve slowly over time. See your doctor immediately if you have:

Bladder and/or bowel dysfunction, causing you to retain waste or be unable to hold it.

Severe or progressive problems in the lower extremities including loss of or altered sensation between the legs, over the buttocks, inner thighs and back of legs (saddle area), and feet/heels.

Pain, numbness or weakness spreading to one or both legs that may cause you to stumble or have difficulty getting up from a chair.

What would doctor do?

To diagnose CES, the doctor will probably evaluate your medical history, give you a physical examination and order multiple imaging studies.

Medical history

Describe your overall health, when the symptoms of CES began and how they impact your activities.

Physical exam

The doctor assesses stability, sensation, strength, reflexes, alignment and motion. He or she may ask you to stand, sit, walk on your heels and toes, bend forward, backward and to the sides, and lift your legs while lying down.

The doctor checks the tone and numbness of anal muscles.

You may need blood tests.

Imaging: You may get X-rays,

MRIs (magnetic resonance imaging)
CT's in case of fractures

Surgery

If you have CES, you may need urgent surgery to remove the material that is pressing on the nerves. The surgery may prevent pressure on the nerves from reaching the point at which damage is irreversible.

Living with CES

Surgery won't help if you already have permanent nerve damage.

In this case, you can learn how to make living with CES more tolerable.

In addition to medical personnel, you may want to get help from an occupational therapist, social worker, continence advisor or sex therapist.

Involve your family in your care. To learn all you can about managing the condition, you may want to join a CES support group.

Managing bladder and bowel

Some bladder and bowel function is automatic, but the parts under voluntary control may be lost if you have CES. This means you may not know when you need to urinate or move your bowels, and/or you may not be able to eliminate waste normally. Some general recommendations for managing bladder and bowel dysfunction:

Bladder

Empty the bladder completely with a catheter 3-4 times each day.

Drink plenty of fluids and practice regular personal hygiene to prevent urinary tract infection.

Bowel

Check for the presence of waste regularly and clear the bowels with gloved hands. You may want to use glycerine suppositories or enemas to help empty the bowels. Use protective pads and pants to prevent leaks.